

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-12 canceled.

13. (Previously presented) A light source arrangement comprising
a radiation source that emits radiation from the wavelength range 400 to 500 nm of the
spectrum, and
a mixture of luminescent materials arranged to receive said radiation,
wherein one of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, Sc, La, Gd, and Sm and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein another of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, Sc, La, Gd, Sm and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.
14. (Previously presented) The light source arrangement of claim 13 wherein said radiation source is a blue-emitting light-emitting diode.

15. (Previously presented) The light source arrangement of claim 14 wherein said light-emitting diode is based on GaN or InGaN.

16. (Currently amended) The light source arrangement of claim 13 wherein said another of said luminescent materials includes a garnet structure having the formula ~~(Tb_{1-x}~~

~~SE_xCe_y)₃(Al,Ga)₅O₁₂ (Tb_{1-x-y}SE_xCe_y)₃(Al,Ga)₅O₁₂, where~~

SE = Y, Gd, La, Sm and/or Lu; $0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$.

17. (Previously presented) The light source arrangement of claim 14 wherein said mixture of luminescent materials is provided as a mixture of inorganic luminescent pigment powders that is dispersed in a transparent plastic casting compound that is arranged to receive radiation from the radiation source.

18. (Currently amended) The light source arrangement of claim 17 wherein said luminescent pigment powders have particle sizes $\leq 20 \mu\text{m}$ and a mean particle diameter $d_{50} \leq 5 \mu\text{m}$.

19. (Previously presented) The light source arrangement of claim 17 wherein said casting compound also includes at least one member of the group consisting of a thixotropic agent, a mineral diffusor, a water repellent and a bonding agent.

20. (Previously presented) The light source arrangement of claim 18 wherein said casting compound also includes at least one member of the group consisting of a thixotropic agent, a mineral diffusor, a water repellent and a bonding agent.

21. (Previously presented) The light source arrangement of claim 17, 18, 19 or 20 wherein said mixture of luminescent materials is excitable by radiation from the range of 400 to 500 nm.

22. (Previously presented) The light source arrangement of claim 17, 18, 19 or 20 wherein said mixture of luminescent materials is excitable by radiation from the range of 420 to 490 nm.

23. (Currently amended) The light source arrangement of claim 17, 18, 19 or 20 wherein said another of said luminescent materials includes a garnet structure having the formula

~~(Tb_{1-x-y}SE_xCe_y)₃(Al,Ga)₅O₁₂~~ (Tb_{1-x-y}SE_xCe_y)₃(Al,Ga)₅O₁₂, where

SE = Y, Gd, La, Sm and/or Lu; $0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$.

24. (Previously presented) The light source arrangement of claim 17, 18, 19 or 20 wherein said another of said luminescent materials includes a garnet structure having the formula

(Tb_{1-x-y}SE_xCe_y)₃(Al,Ga)₅O₁₂, where

SE = Y, Gd, La, Sm and/or Lu; $0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$, and

wherein said mixture of luminescent materials is excitable by radiation from the range of 400 to 500 nm.

25. (Previously presented) The light source arrangement of claim 17, 18, 19 or 20 wherein said another of said luminescent materials includes a garnet structure having the formula

(Tb_{1-x-y}SE_xCe_y)₃(Al,Ga)₅O₁₂, where

SE = Y, Gd, La, Sm and/or Lu; $0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$ and

wherein said mixture of luminescent materials is excitable by radiation from the range of 420 to 490 nm.

26. (Previously presented) The light source arrangement of claim 13, 14, 15, 16 or 17 wherein said radiation is partially converted radiation and is mixed with emitted radiation from said radiation source to produce white light.

27. (Previously presented) A light source arrangement comprising
a radiation source that emits radiation from the wavelength range 430 to 480 nm of the spectrum, and
a mixture of luminescent materials arranged to receive said radiation,
wherein one of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, Sc, La, Gd, and Sm and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein another of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, Sc, La, Gd, Sm and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.
28. (Previously presented) A light source arrangement comprising a radiation source that emits radiation from the wavelength range 400-500 nm of the spectrum, and
a mixture of luminescent materials having different compositions arranged to receive said radiation,
wherein at least one of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, Sc, La, Gd, Sm, and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.

29. (New) A light source arrangement comprising
a radiation source that emits radiation from the wavelength range 400 to 500 nm of the spectrum, and
a mixture of luminescent materials arranged to receive said radiation,
wherein one of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, La, Gd, and Sm and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein another of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, La, Gd, Sm and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,
wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.
30. (New) The light source arrangement of claim 29 wherein said radiation source is a blue-emitting light-emitting diode.
31. (New) The light source arrangement of claim 30 wherein said light-emitting diode is based on GaN or InGaN.
32. (New) The light source arrangement of claim 29 wherein said another of said luminescent materials includes a garnet structure having the formula $(Tb_{1-x-y}SE_xCe_y)_3(Al,Ga)_5O_{12}$, where
 $SE = Y, Gd, La, Sm \text{ and/or } Lu; 0 \leq x \leq 0.5 - y; \text{ and}$
 $0 < y < 0.1.$

33. (New) The light source arrangement of claim 30 wherein said mixture of luminescent materials is provided as a mixture of inorganic luminescent pigment powders that is dispersed in a transparent plastic casting compound that is arranged to receive radiation from the radiation source.

34. (New) The light source arrangement of claim 33 wherein said luminescent pigment powders have particle sizes $\leq 20 \mu\text{m}$ and a mean particle diameter $d_{50} \leq 5 \mu\text{m}$.

35. (New) The light source arrangement of claim 33 wherein said casting compound also includes at least one member of the group consisting of a thixotropic agent, a mineral diffusor, a water repellent and a bonding agent.

36. (New) The light source arrangement of claim 34 wherein said casting compound also includes at least one member of the group consisting of a thixotropic agent, a mineral diffusor, a water repellent and a bonding agent.

37. (New) The light source arrangement of claim 33, wherein said mixture of luminescent materials is excitable by radiation from the range of 400 to 500 nm.

38. (New) The light source arrangement of claim 33, wherein said mixture of luminescent materials is excitable by radiation from the range of 420 to 490 nm.

39. (New) The light source arrangement of claim 33, wherein said another of said luminescent materials includes a garnet structure having the formula

$(\text{Tb}_{1-x-y}\text{SE}_x\text{Ce}_y)_3(\text{Al,Ga})_5\text{O}_{12}$, where

$\text{SE} = \text{Y, Gd, La, Sm and/or Lu}; 0 \leq x \leq 0.5 - y; \text{ and}$

$0 < y < 0.1.$

40. (New) The light source arrangement of claim 33, wherein said another of said luminescent materials includes a garnet structure having the formula

$(\text{Tb}_{1-x-y}\text{SE}_x\text{Ce}_y)_3(\text{Al,Ga})_5\text{O}_{12}$, where

$\text{SE} = \text{Y, Gd, La, Sm and/or Lu}; 0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$, and

wherein said mixture of luminescent materials is excitable by radiation from the range of 400 to 500 nm.

41. (New) The light source arrangement of claim 33, wherein said another of said luminescent materials includes a garnet structure having the formula

$(\text{Tb}_{1-x-y}\text{SE}_x\text{Ce}_y)_3(\text{Al,Ga})_5\text{O}_{12}$, where

$\text{SE} = \text{Y, Gd, La, Sm and/or Lu}; 0 \leq x \leq 0.5 - y$; and

$0 < y < 0.1$ and

wherein said mixture of luminescent materials is excitable by radiation from the range of 420 to 490 nm.

42. (New) The light source arrangement of claim 29, wherein said radiation is partially converted radiation and is mixed with emitted radiation from said radiation source to produce white light.

43. (New) A light source arrangement comprising

a radiation source that emits radiation from the wavelength range 430 to 480 nm of the spectrum, and

a mixture of luminescent materials arranged to receive said radiation, wherein one of said luminescent materials has a Ce-activated garnet structure having the formula $\text{A}_3\text{B}_5\text{O}_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, La, Gd, and Sm and the second component B contains at least one element from the group consisting of Al, Ga and In,

wherein another of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, La, Gd, Sm and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,

wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.

44. (New) A light source arrangement comprising a radiation source that emits radiation from the wavelength range 400-500 nm of the spectrum, and

a mixture of luminescent materials having different compositions arranged to receive said radiation,

wherein at least one of said luminescent materials has a Ce-activated garnet structure having the formula $A_3B_5O_{12}$, in which the first component A contains at least one element from the group consisting of Y, Lu, La, Gd, Sm, and Tb and consists at least in part of Tb as a constituent of the host lattice, and the second component B contains at least one element from the group consisting of Al, Ga and In,

wherein said radiation is at least partially converted into longer-wave radiation by said mixture of luminescent materials.